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The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A sortation system, comprising:

a sorter including a continuous member defining a plurality of transport positions of said continuous member;

a plurality of sort destinations for receiving product discharged from said continuous member; and

an induction system comprising at least one induction unit having a receiving end for receiving product from a product source and a discharge end for discharging product to said continuous member, said at least one induction unit including a plurality of tandem conveying units between said receiving end and said discharge end and a control controlling said conveying units;

wherein said at least one induction unit follows a speed of said continuous member including starting substantially as soon as said continuous member is moving and decreasing in speed substantially only when said continuous member decreases in speed.

2. The sortation system in claim 1 wherein said at least one induction unit comprises at least two induction units, each of said induction units discharging product to said continuous member.

3. The sortation system in claim 1 wherein at least one of said induction units is started substantially as soon as said continuous member is moving and decreased in speed substantially only when said continuous member decreases in speed and wherein another of said induction units is capable of decreasing in speed irrespective of the speed of said continuous member.

4. The sortation system in claim 2 wherein said control books at least one transport position for receipt of product from either of said induction units.

5. The sortation system in claim 4 wherein said control books a transport position for a product when that product is at a booking conveying unit and adjusts relative spacing between product and the respective transport position booked for that product on ones of said conveying units downstream of said booking conveying unit, wherein multiple product can be booked on either of said induction units and awaiting discharge to said continuous member.

6. The sortation system in claim 4 wherein said control maintains any booking of transport units for product on said at least one induction unit notwithstanding variation in speed of said continuous member.
7. The sortation system in claim 4 wherein said control maintains any booking of transport units for product on said at least one induction unit notwithstanding a substantial halt in speed of said continuous member.
8. The sortation system in claim 3 wherein said at least one of said induction units discharges product to said continuous member with insufficient gap between product if a sufficient gap cannot be achieved.
9. The sortation system in claim 8 wherein said sorter discharges product with an insufficient gap to a recirculation line.
10. The sortation system in claim 1 wherein said at least one induction unit includes another induction unit that does not follow said continuous member and can decrease in speed irrespective of said continuous member.
11. The sortation system in claim 1 wherein said product source substantially excludes product accumulation.
12. The sortation system in claim 1 wherein said product source comprises substantially only belt conveyors.
13. The sortation system in claim 1 wherein said conveying units are closed-loop regulated.
14. The sortation system in claim 1 wherein said conveying units are belt conveyors.
15. The sortation system in claim 1 wherein said conveying units have particular lengths and wherein said induction units are adapted to discharging product to said continuous member having a dimension that is greater than said particular lengths.

16. A sortation system, comprising:

a sorter including a continuous member defining a plurality of transport positions of said continuous member;

a plurality of sort destinations for receiving product discharged from said continuous member;

an induction system comprising at least two induction units, each of said induction units having a receiving end for receiving product from a product source and a discharge end for discharging product to said continuous member; and

a control determining gap between product that will be discharged to said continuous member, wherein at least one of said induction units is capable of discharging product to said continuous member irrespective of gap between product.

17. The sortation system in claim 16 wherein another of said at least two induction units decreases in speed in response to said at least one of said induction units discharging product to said merge irrespective of gap between product.

18. The sortation system in claim 17 wherein said another of said induction units performs an activation sequence after decreasing in speed.

19. The sortation system in claim 16 including a recirculation line from said continuous member to said receiving end of one of said induction units for recirculating product discharged to said merge with insufficient gap between the product.

20. The sortation system in claim 19 wherein said control monitors a proportion of product in recirculation.

21. The sortation system in claim 20 wherein said at least one of said induction units discontinues discharging product to said merge irrespective of gap if the proportion of product in recirculation exceeds a particular level.

22. The sortation system in claim 19 wherein said recirculation line substantially excludes product accumulation.

23. The sortation system in claim 22 wherein said recirculation line comprises substantially only belt conveyors.
24. The sortation system in claim 16 wherein each of said induction units includes a plurality of tandem conveying units between said receiving end and said discharge end.
25. The sortation system in claim 24 wherein said control books at least one transport position for receipt of product from either of said induction units.
26. The sortation system in claim 25 wherein said control books a transport unit for a product when that product is at a booking conveying unit and adjusts relative spacing between product and the respective transport position booked for that product on ones of said conveying units downstream of said booking conveying unit, wherein multiple product can be booked on either of said induction units and awaiting discharge to said continuous member.
27. The sortation system in claim 25 wherein said control maintains any booking of transport units for product on one of said induction units notwithstanding variation in speed of said continuous member.
28. The sortation system in claim 27 wherein said control maintains any booking of transport units for product on one of said induction units notwithstanding a substantial halt in speed of said continuous member.
29. The sortation system in claim 24 wherein said conveying units are closed-loop regulated.
30. The sortation system in claim 24 wherein said conveying units are belt conveyors.
31. The sortation system in claim 24 wherein said conveying units have particular lengths and wherein said induction units are adapted to discharging product to said continuous member having a dimension that is greater than said particular lengths.
32. The sortation system in claim 17 wherein at least one of said induction units follows said continuous member including starting as soon as said continuous member is moving and decreasing in speed only when said continuous member decreases in speed.

33. The sortation system in claim 32 wherein the other of said induction units does not follow said continuous member and can decrease in speed irrespective of said continuous member.

34. A sortation system, comprising:

a sorter including a continuous member defining a plurality of transport positions of said continuous member;

a plurality of sort destinations for receiving product discharged from said continuous member; and

an induction system comprising at least one induction unit having a receiving end for receiving product from a product source and a discharge end for discharging product to said continuous member, said at least one induction unit including a plurality of tandem conveying units between said receiving end and said discharge end and a control controlling said conveying units, wherein said control books at least one transport position for receipt of product from said at least one induction unit, wherein said control books a transport unit for a product when that product is at a booking conveying unit and adjusts relative spacing between a product and the respective transport position booked for that product on ones of said conveying units downstream of said booking conveying unit.

35. The sortation system in claim 34 wherein said sorter comprises a carousel sorter and said continuous member comprises a plurality of carriers joined together in a substantially continuous chain, said carriers defining said transport positions.

36. The sortation system in claim 35 wherein said carousel sorter comprises a cross-belt sorter.

37. The sortation system in claim 35 wherein said carousel sorter comprises a tilt-tray sorter.

38. The sortation system in claim 34 wherein said sorter comprises a linear sorter and said continuous member comprises a conveying surface and a plurality of diverters along said conveying surface, said diverters defining said transport positions.

39. The sortation system in claim 38 wherein said sorter comprises a positive displacement sorter.
40. The sortation system in claim 34 including product sensors at said conveying units.
41. The sortation system in claim 34 including a product source feeding product to an upstream one of said conveying units and wherein said one of said conveying units substantially operates at a speed that is greater than or equal to a speed of said product source.
42. The sortation system in claim 41 wherein said product source comprises belt conveyors.
43. The sortation system in claim 41 wherein said product source substantially excludes product accumulation.
44. The sortation system in claim 34 wherein speeds of said conveying units are synchronized with a speed of said continuous member.
45. The sortation system in claim 34 wherein said continuous member operates at a variable speed and wherein speeds of said conveying units vary at least in part with the speed of said continuous member.
46. The sortation system in claim 34 wherein said control maintains any booking of transport units for product on said at least one induction unit notwithstanding variation in speed of said continuous member.
47. The sortation system in claim 34 wherein said control maintains any booking of transport units for product on said at least one induction unit notwithstanding a substantial halt in speed of said continuous member.
48. The sortation system in claim 34 wherein said conveying units are closed-loop regulated.
49. The sortation system in claim 34 wherein said conveying units are belt conveyors.

50. The sortation system in claim 34 wherein said conveying units have particular lengths and wherein said at least one induction unit is adapted to discharging product to said continuous member having a dimension that is greater than said particular lengths.

51. The sortation system in claim 34 wherein said induction system comprises at least two induction units, wherein said induction units discharge product to said continuous member.

52. The sortation system in claim 51 wherein at least one of said induction units follows said continuous member including starting as soon as said continuous member is moving and decreasing in speed only when said continuous member decreases in speed.

53. The sortation system in claim 52 wherein said at least one of said induction units discharges product to said continuous member with insufficient gap between product if a sufficient gap cannot be achieved.

54. The sortation system in claim 53 wherein said sorter discharges product with an insufficient gap to a recirculation line.

55. The sortation system in claim 52 wherein the other of said induction units does not follow said continuous member and can decrease in speed irrespective of said continuous member.

56. The sortation system in claim 52 wherein said product source substantially excludes product accumulation.

57. The sortation system in claim 52 wherein said product source comprises belt conveyors.

58. A sortation system, comprising:
a carousel sorter including a plurality of product carriers arranged in an endless loop;
a plurality of sort destinations for receiving product discharged from said carriers; and
an induction system comprising at least one induction unit having a receiving end for receiving product from a product source and a discharge end for discharging product to said carriers; and

a control monitoring product on said carriers and booking carriers for product on said induction system, wherein said control is capable of booking carriers irrespective of whether the carriers are already carrying product.

59. The sortation system in claim 58 wherein said control rescinds a booking of a carrier carrying a product if that carrier does not discharge that product to one of said sort destinations prior to arriving at said induction system.

60. The sortation system in claim 58 wherein said at least one induction unit includes a plurality of tandem conveying units between said receiving end and said discharge end, wherein said control books at least one carrier for receipt of product when that product is on one of said conveying units and adjusts relative spacing between product and the respective carrier booked
5 for that product on downstream ones of said conveying units; whereby multiple product can be booked on said at least one induction unit and awaiting discharge to said continuous member.

61. The sortation system in claim 58 wherein said control maintains any booking of transport units for product on said at least one induction unit notwithstanding variation in speed of said continuous member.

62. The sortation system in claim 58 wherein said control maintains any booking of transport units for product on said at least one induction unit notwithstanding a substantial halt in speed of said continuous member.

63. The sortation system in claim 58 wherein said product source substantially excludes product accumulation.

64. The sortation system in claim 58 wherein said product source comprises substantially only belt conveyors.

65. The sortation system in claim 58 wherein said conveying units are closed-loop regulated.

66. The sortation system in claim 58 wherein said conveying units are belt conveyors.

67. The sortation system in claim 58 wherein said conveying units have particular lengths and wherein said induction units are adapted to discharging product to said continuous member having a dimension that is greater than said particular lengths.

68. A method of inducting product to a sorter, the sorter including a continuous member defining a plurality of transport positions of said continuous member and a plurality of sort destinations for receiving product discharged from said continuous member, comprising:

providing at least one induction unit including a plurality of tandem conveying units;

5 receiving product with said at least one induction unit from a product source and discharging product from said at least one induction unit to the continuous member; and

following a speed of the continuous member with said at least one induction unit including starting said at least one induction unit substantially as soon as the continuous member is moving and decreasing a speed of said at least one induction unit substantially only when the
10 continuous member decreases in speed.

69. The method of inducting of claim 68 wherein said at least one induction unit comprises at least two induction units, and including discharging product to said continuous member.

70. The method of inducting of claim 69 including starting at least one of said induction units substantially as soon as said continuous member is moving and decreasing said at least one of said induction units in speed substantially only when said continuous member decreases in speed, and further including at least occasionally decreasing another of said induction units in
5 speed irrespective of the speed of said continuous member.

71. The method of inducting of claim 69 including booking at least one transport position for receipt of product from either of said induction units.

72. The method of inducting of claim 71 including booking a transport position for a product when that product is at a booking conveying unit and adjusting relative spacing between product and the respective transport position booked for that product on ones of said conveying units downstream of said booking conveying unit.

73. The method of inducting of claim 71 including maintaining any booking of transport units for product on said at least one induction unit notwithstanding variation in speed of said continuous member.
74. The method of inducting of claim 73 including maintaining any booking of transport units for product on said at least one induction unit notwithstanding a substantial halt in speed of said continuous member.
75. The method of inducting of claim 70 including at least occasionally discharging product from said at least one of said induction units to said continuous member with insufficient gap between product if a sufficient gap cannot be achieved.
76. The method of inducting of claim 75 including discharging product with an insufficient gap to a recirculation line.
77. The method of inducting of claim 68 including providing another induction unit that does not follow said continuous member and can decrease in speed irrespective of said continuous member.
78. The method of inducting of claim 68 wherein said product source substantially excludes product accumulation.
79. The method of inducting of claim 68 wherein said product source comprises substantially only belt conveyors.
80. The method of inducting of claim 68 including closed-loop regulating said conveying units.
81. The method of inducting of claim 68 wherein said conveying units are belt conveyors.
82. The method of inducting of claim 68 wherein said conveying units have particular lengths and including at least occasionally discharging product to said continuous member having a dimension that is greater than said particular lengths.

83. A method of inducting product to a sorter, the sorter including a continuous member defining a plurality of transport positions of said continuous member and a plurality of sort destinations for receiving product discharged from said continuous member, comprising:--

providing at least two induction units, each of said induction units including a plurality
5 of tandem conveying units;

receiving product with each of said induction units from a product source and
discharging product from each of said induction units to the continuous member through said
merge; and

determining gap between product that will be discharged to said continuous member and
10 at least occasionally discharging product from at least one of said induction units to said
continuous member irrespective of gap between product.

84. The method of inducting of claim 83 including decreasing a speed of another of said at
least two induction units in response to said at least one of said induction units discharging
product to said merge irrespective of gap between product.

85. The method of inducting of claim 84 including performing an activation sequence after
decreasing in speed said another of said induction units.

86. The method of inducting of claim 83 including recirculating product discharged to said
merge with insufficient gap between the product.

87. The method of inducting of claim 86 including monitoring a proportion of product being
recirculated.

88. The method of inducting of claim 87 including discontinuing discharging product to said
merge irrespective of gap if the proportion of product in recirculation exceeds a particular level.

89. The method of inducting of claim 83 wherein each of said induction units includes a
plurality of tandem conveying units between said receiving end and said discharge end.

90. The method of inducting of claim 83 including booking at least one transport position for
receipt of product from either of said induction units.

91. The method of inducting of claim 90 including booking a transport position for a product when that product is at a booking conveying unit and adjusting relative spacing between product and the respective transport position booked for that product on ones of said conveying units downstream of said booking conveying unit.
92. The method of inducting of claim 90 including maintaining any booking of transport units for product on one of said induction units notwithstanding variation in speed of said continuous member.
93. The method of inducting of claim 92 including maintaining any booking of transport units for product on one of said induction units notwithstanding a substantial halt in speed of said continuous member.
94. The method of inducting of claim 83 including closed-loop regulating said conveying units.
95. The method of inducting of claim 83 wherein said conveying units are belt conveyors.
96. The method of inducting of claim 83 wherein said conveying units have particular lengths and including at least occasionally discharging product to said continuous member having a dimension that is greater than said particular lengths.
97. The method of inducting of claim 83 including following said continuous member with said at least one of said induction units including starting said at least one of said induction units as soon as said continuous member is moving and decreasing in speed said at least one of said induction units substantially only when said continuous member decreases in speed.
98. The method of inducting of claim 97 including at least occasionally decreasing a speed of the other of said induction units irrespective of the speed of said continuous member.
99. A method of inducting product to a sorter, the sorter including a continuous member defining a plurality of transport positions of said continuous member and a plurality of sort destinations for receiving product discharged from said continuous member, comprising:
providing a plurality of tandem conveying units;

5 receiving product with said conveying units from a product source and discharging
product from said conveying units to the continuous member;
booking at least one transport position for receipt of a product from said conveying units,
including booking the product when that product is at a booking conveying unit; and
adjusting relative spacing between a product and the respective transport position booked
10 for that product when the product is on ones of said conveying units downstream of said
booking conveying unit.

100. The method of inducting of claim 99 wherein said continuous member comprises a plurality of carriers joined together in a substantially continuous chain, said carriers defining said transport positions.

101. The method of inducting of claim 100 wherein said carousel sorter comprises a cross-belt sorter.

102. The method of inducting of claim 100 wherein said carousel sorter comprises a tilt-tray sorter.

103. The method of inducting of claim 99 wherein said continuous member comprises a conveying surface and a plurality of diverters along said conveying surface, said diverters defining said transport positions.

104. The method of inducting of claim 103 wherein said diverters and said conveying surface define a positive displacement sorter.

105. The method of inducting of claim 99 including sensing product at said conveying units.

106. The method of inducting of claim 99 including feeding product from a product source to an upstream one of said conveying units and operating said one of said conveying units substantially at a speed that is greater than or equal to a speed of said product source.

107. The method of inducting of claim 106 wherein said product source comprises belt conveyors.

108. The method of inducting of claim 104 wherein said product source substantially excludes product accumulation.

109. The method of inducting of claim 99 including synchronizing speeds of said conveying units with a speed of said continuous member.

110. The method of inducting of claim 99 including operating said continuous member at a variable speed and varying speeds of said conveying units at least in part with the speed of said continuous member.

111. The method of inducting of claim 99 including maintaining any booking of transport units for product on said at least one induction unit notwithstanding variation in speed of said continuous member.

112. The method of inducting of claim 99 including maintaining any booking of transport units for product on said at least one induction unit notwithstanding a substantial halt in speed of said continuous member.

113. The method of inducting of claim 99 including closed-loop regulating speeds of said conveying units.

114. The method of inducting of claim 99 wherein said conveying units are belt conveyors.

115. The method of inducting of claim 99 wherein said conveying units have particular lengths and including at least occasionally discharging product from said at least one induction unit to said continuous member having a dimension that is greater than said particular lengths.

116. The method of inducting of claim 99 wherein said induction system comprises at least two induction units, and including discharging product from said induction units to said continuous member.

117.— The method of inducting of claim 116 including following said continuous member with at least one of said induction units including starting said at least one of said induction units as

soon as said continuous member is moving and decreasing in speed said at least one of said induction units only when said continuous member decreases in speed.

118. The method of inducting of claim 117 including discharging product from said at least one of said induction units to said continuous member with insufficient gap between product if a sufficient gap cannot be achieved.

119. The method of inducting of claim 118 including recirculating product discharged with an insufficient gap.

120. The method of inducting of claim 117 including at least occasionally decreasing a speed of the other of said induction units irrespective of the speed of said continuous member.

121. A method of inducting product to a carrousel sorter including a plurality of product carriers arranged in an endless loop and a plurality of sort destinations for receiving product discharged from said product carriers, comprising:

providing a plurality of tandem conveying units;

5 receiving product with said conveying units from a product source and discharging product from said conveying units to the product carriers; and

monitoring product on said carriers and booking carriers for product on said conveying units, including at least occasionally booking carriers irrespective of whether the carriers are already carrying product.

122. The method of inducting of claim 121 including rescinding a booking of a carrier carrying a product if that carrier does not discharge that product to one of said sort destinations prior to arriving at said conveying units.

123. The method of inducting of claim 121 wherein said at least one induction unit includes a plurality of tandem conveying units between said receiving end and said discharge end, further including booking at least one carrier for receipt of product when that product is on one of said conveying units and adjusting relative spacing between product and the respective carrier
5 booked for that product on downstream ones of said conveying units.

124. The method of inducting of claim 121 including maintaining any booking of transport units for product on said at least one induction unit notwithstanding variation in speed of said continuous member.

125. The method of inducting of claim 124 including maintaining any booking of transport units for product on said at least one induction unit notwithstanding a substantial halt in speed of said continuous member.

126. The method of inducting of claim 121 including closed-loop regulating of said conveying units.

127. The method of inducting of claim 121 wherein said conveying units are belt conveyors.

128. The method of inducting of claim 121 wherein said conveying units have particular lengths and including at least occasionally discharging product to said continuous member having a dimension that is greater than said particular lengths.

129. A conveyor induction system, comprising;
a frame including at least two spaced apart supports defining a control compartment between said supports;
a plurality of tandem conveying units supported by said supports;
a computer-based control in said control compartment controlling at least said conveying units; and
at least one user input control device at said frame for receiving user input for said control.

130. The conveyor induction system in claim 129 including another frame and another plurality of tandem conveying units supported by said another frame, said computer-based control controlling said another plurality of conveying units.

131. The conveyor induction system in claim 130 wherein said another frame includes at least two other supports defining another control compartment between said other supports and output devices in said another control compartment for operating said another plurality of tandem conveying units.

132. The conveyor induction system in claim 129 including a status indicator on said frame for indicating the status of said tandem conveying units. —

133. The conveyor induction system in claim 129 wherein each of said conveying units includes a motor, at least two pulleys and a belt, said pulleys supporting said belt and said motor operating at least one of said pulleys, wherein said belt is removable by moving one end of each of said pulleys.